



# Conservation Conversation

Summer 2018 - Volume 31, No. 2

## 2018 Centre County Envirothon

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The Penns Valley I team represented Centre County at the Pennsylvania Envirothon on May 22 and 23 at the Susquehanna University and Camp Mount Luther. The Penns Valley team placed 19<sup>th</sup> of the 65 county teams participating. Carmichaels Area High School, Greene County won the Pennsylvania Envirothon championship and represented Pennsylvania at the National Conservation Foundation North American Envirothon in late July at Idaho State University in Pocatello, Idaho where they placed 18<sup>th</sup> of the 50 teams participating.

The Centre County Conservation District sponsored the 34<sup>th</sup> annual Centre County Envirothon on May 9, 2018 at Bald Eagle State Park. Thirteen teams from Central PA Institute of Science and Technology, St. Joseph's Catholic Academy, Penns Valley Area, Bald Eagle Area, Bellefonte and State College Area high schools participated on a beautiful spring day. The Envirothon tests students' knowledge of the following five subject areas: Aquatic Ecology; Forestry; Soils and Land Use; Wildlife; and the Benefits of Grassland and Pasture Management, the current environmental issue topic for 2018.

For the second consecutive year, a team from Penns Valley Area high school captured the County Envirothon title. The Penns Valley I team scored 387 out of a possible 500 points. Team members Nicholas Kubalak, Jared Kines, Zachary Limbaugh, Olivia Krum and Abby Zajaczkowski also achieved the highest scores at the Aquatic Ecology, Forestry, and Soils and Land Use stations. The State College "Swamp Dawgz" team placed second with a score of 386 and also achieved the highest scores at the Wildlife and Current Issue stations. The Bald Eagle Area I team placed third with a score of 331. John Howell is the Penns Valley Area advisor.



*Penns Valley I Team (from left) Olivia Krum, Abby Zajaczkowski, Nicholas Kubalak, Advisor-John Howell, Jared Kines, Zachary Limbaugh*

### Mission Statement

*The Centre County Conservation District is a committed, professional agency functioning as the primary local source of assistance to all individuals and organizations who benefit from the county's natural resources that we collectively strive to sustain and improve.*

## **BUILDING A HOUSE OR PERMANENT STRUCTURE??**

### **Do I need a permit?**

**PERMIT(s):** This term is shared by many different levels of government- federal, state, and local; as well as their regulating agencies. It also means different things or requirements among every private person! From CCCD office- we use the term to refer to Environmental permit(s) in particular, specifically related to PA and Federal regulations related to: Soil Erosion and Sediment Control (earth disturbance activities) and Stream/Floodway or wetland activities.

**Who?** You, the Property Owner, Operator or Contractor must follow the approved plan or permit, implement the best management practices (BMPs) and comply with Erosion and Sediment Control regulations (Chapter 102 regs).

**What?** Approvals, permit(s), plans, paperwork, authorizations- when applicable. Requirements vary based on area of disturbance involved and proximity to streams.

**When?** Before work/project breaks ground or starts.

**Where?** Property you own or are building on in Centre County.

**Why?** Goal/Objective- Ultimately to protect the environment and its inhabitants, by minimizing impacts (e.g., flooding) to properties, streams & water systems, as well as nearby residents.

**How?** Contact CCCD for guidance and approvals that may be needed/required.

**ALSO:** Please be aware, in addition to the above discussion of disturbance area (based on the specific location of and proposed activity) - you may be required to obtain other permits from: LOCAL Municipality, State, Federal, or other agencies. Ultimately, it is your responsibility to find out- but we can help you. **CONTACT US.**

### **Other permit examples:**

-Building Permit

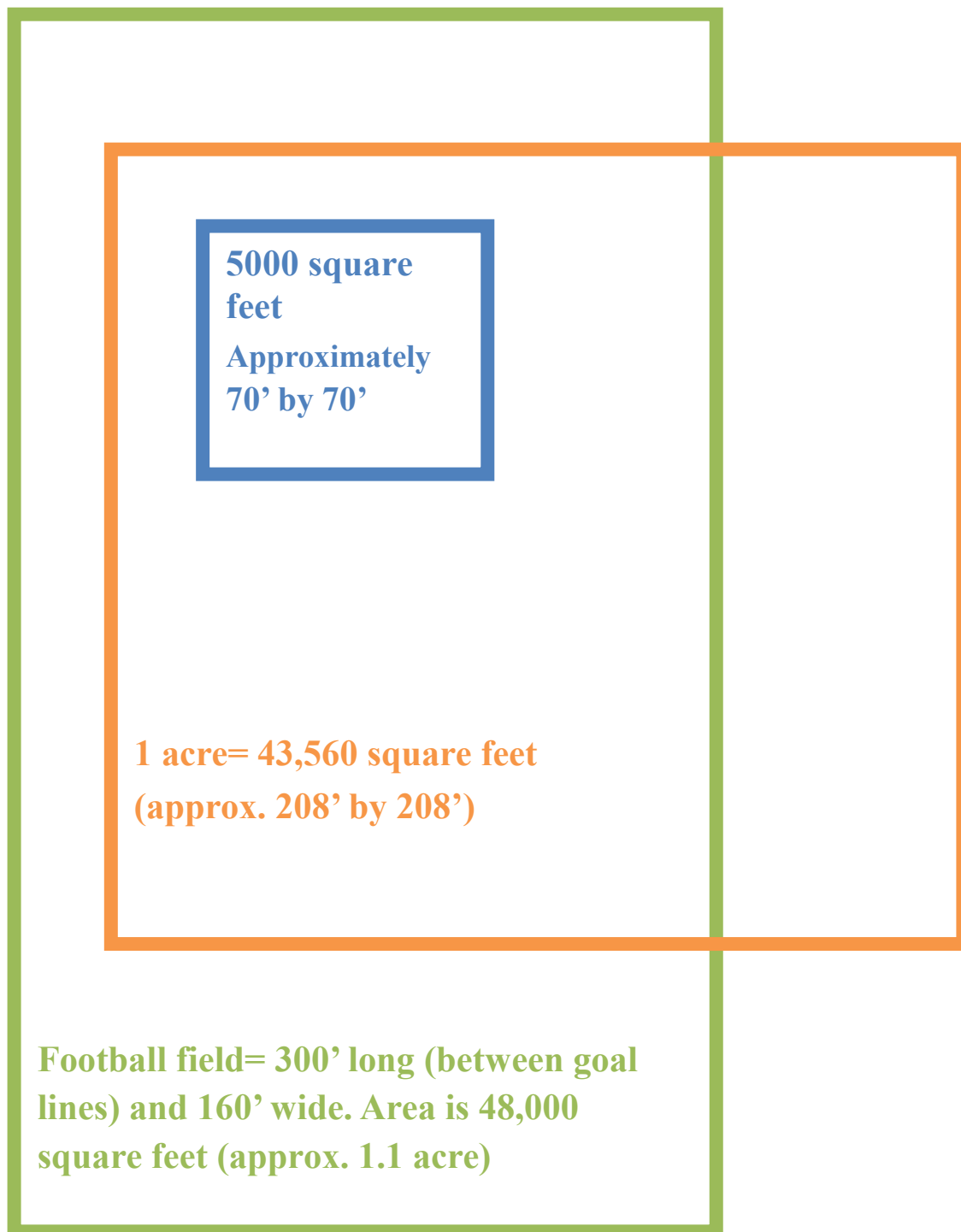
-Occupancy Permit

-Land Development

-Chapter 105 stream encroachment Permit (*are you near a stream or wetland?*)

-Utilities

-Sewage/septic



**Please Note:** *The above illustration is not to scale and is approximate- for illustrative purposes only.*

*ALSO, please be aware that an actual project area may not be a “square” as depicted above for the 5000 sq. ft. (blue) and 1 acre (orange) - and can be any shape or combination of shapes.*



## Dirt, Gravel and Low-Volume Roads Summary



**“BETTER ROADS...CLEANER STREAMS”**

This road improvement project was funded  
with a grant provided by



CENTRE COUNTY CONSERVATION DISTRICT

**DIRT GRAVEL AND LOW-VOLUME ROAD PROGRAM**

For Additional Information, Contact the District at 814-355-6817

**Are you part of a  
public-road owning  
entity desiring to be  
ESM trained and  
therefore eligible for  
DGLVR funds?**

**Contact the Conservation  
District at (814) 355-6817  
or check out the Center for  
Dirt and Gravel Road  
Studies website at:  
[www.dirtandgravel.psu.edu](http://www.dirtandgravel.psu.edu)  
to learn more.**

2018 was the 21<sup>st</sup> year for the Dirt, Gravel and Low-Volume Road Program (DGLVR). Through the program to date, Centre County has awarded over \$1,000,000 in funding for Dirt, Gravel and Low-Volume Road projects. Public-road owning entities (municipalities and other state or local public entities) may apply for grant monies; funding eligibility requires at least one individual who is responsible for project design and oversight to attend a two-day Environmentally Sensitive Maintenance (ESM) for Dirt, Gravel and Low-Volume Roads training. ESM trainings are regularly held throughout the state and are offered at no-cost to public-road owning entities.

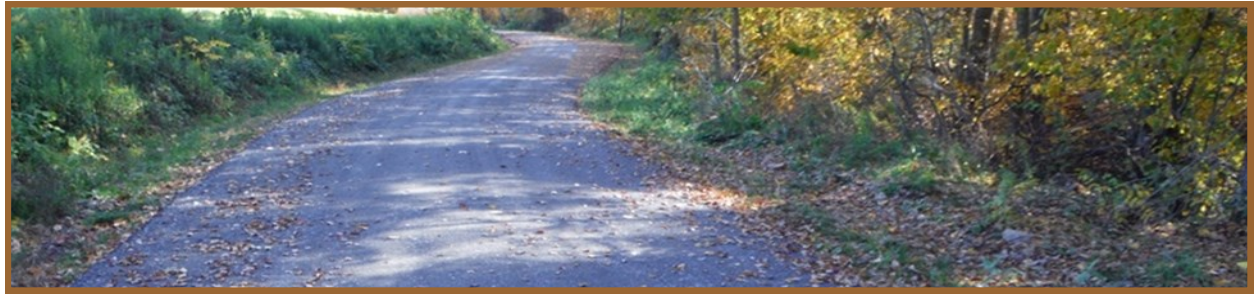
The 2018 grant round saw an uptick in the number of grant requests submitted from eligible municipalities throughout the county. The Conservation District's Quality Assurance Board (QAB) visited twenty-one (21) sites from ten (10) municipal applicants – Benner, Boggs, Gregg, Penn, Union, Harris, Potter, Huston Townships, Unionville Borough and Millheim Borough. The QAB recommended funding and the District's Board of Directors approved funding totaling over **\$442,000** towards the following applications:

### Low-Volume Road projects:

Blue Ball Road (Gregg) – full depth reclamation  
 Egypt Hollow Road (Boggs) – replace/add crosspipes, streambank stabilization  
 Summer Mtn Road (Penn) – replace stream crossing  
 Stauffer Road (Boggs) – add crosspipes  
 Dubbs Road (Union) – fix base, add/replace crosspipes, add driving surface aggregate (DSA)  
 Neff Road (Boggs) – replace stream crossing  
 Barns Lane (Benner) – upgrade inlet boxes, replace crosspipe, stabilize outfall  
 Smith Lane (Harris) – fix base

### Dirt & Gravel Road projects:

Black Hawk Road (Potter) – add crosspipe, reshape ditches, add DSA  
 Vonada Gap Road (Gregg) – add road fill, add crosspipes  
 Lingle Valley Road (Penn) – add DSA  
 Yeager Hollow Road (Huston) – add/replace crosspipes, French mattresses  
 Eagle Cemetery Road (Boggs) – add road fill, add DSA  
 Hill Street (Unionville Borough) – replace crosspipes, fix base, add DSA



The DGLVR program promotes responsible road maintenance practices for not only a better public road system, but a public road system with lower environmental impact on our streams. Oftentimes, an effort to better manage drainage both from the road surface and keeping offsite runoff from draining onto or across the road is key to minimizing road maintenance activities.

### 144<sup>th</sup> Annual Centre County Grange Fair

The Annual Grange Fair was held on Aug. 17-25, 2018. Pictured is the district display booth in the Emporium Building, photographed by Justin Kozak, Watershed Specialist/Education Coordinator. The CCCD display consisted of informational handouts and complimentary seed balls. Thank you to everyone who stopped by our booth. See you next year at the fair!





## **Agricultural Best Management Practices Implementation Grants**

The Centre County Conservation District continues to partner with different organizations and utilize funding from different grant sources to construct Agricultural Best Management Practices on farms throughout Centre County. In 2018 projects are planned for farms located in Halfmoon, Harris, College & Miles townships.

### **Nittany Farm (Harris Township)**

Nittany Farm is home to over 90 dairy heifers and is located at the headwaters of Spring Creek. The project was funded entirely by the landowner who will be receiving tax credits through the Resource Enhancement & Protection Program (REAP). Practices installed include Stream Crossings, Streambank Fence, Interior Pasture Fence & Gates, Heavy Use Area Protection, Water Supply Pipeline, Watering Facilities and a Cattle Walkway.

**Fall 2017**



**Spring 2018**



**Stream Crossing  
being installed dur-  
ing dry conditions.**



**Streambank  
Fence installed  
early Spring  
2018.**

Three stabilized stream crossings were installed along with over 5,500 feet of streambank fence creating an average riparian buffer width of 90 feet and protecting over 2,900 linear feet of stream. Over 12 acres of protected riparian buffer was established. At a later date, 8.5 acres of the buffer will be planted with native trees and shrubs and 3.5 acres will be planted with an herbaceous mix.





**During the time of year when Spring Creek is dry the Heifers are dependent on well water.**

**This photo was taken before improvements were made to the water facility.**

**New interior fence and gates were installed to facilitate the use of the waterer from 2 separate paddocks.**



**An extra-large reinforced stone pad around the new watering facility protects the ground around the waterer as well as two heavy traffic gated areas.**

*Continued...*





**Sacrifice lot located off the barnyard was eliminated.**

**A short Cattle Walkway was installed where the sacrifice lot was located in order to move livestock from the barnyard into pasture.**



## ***We have good news:***

### ***Agricultural Planning Reimbursement Program extended for a second year!***

This program is open to all agricultural operators/landowners in Pennsylvania's Chesapeake Bay watershed. Through this program, farmers can be reimbursed for fees paid to consultants to create manure management plans, nutrient management plans, and agricultural erosion and sediment control plans. Reimbursement funds are allocated based on impact to the Chesapeake Bay and are available on a first-come, first-serve basis.

The cover sheet explaining the program, landowner registration form, reimbursement form, details on how to apply, and reimbursement levels can be found on the PA DEP website—enter search words "*Agriculture Funding Program*".

TeamAg and Larson Design Group will again serve as county-level coordinators. Larson Design Group is the contact for Centre County landowners at 570-374-5700. Please refer questions about the program directly to them.

**Registration deadline: April 01, 2019.**

Note: The limit is \$6,000 per farming operation for program cycle (2018-2019). Planned acres reimbursed through this program last year (2017-2018) are not eligible to be reimbursed again.





## Supporting Beneficial Insects on the Farm or in the Home Garden

**1 out of every 3 bites of food we eat we owe to pollinators.** As honeybees suffer damaging losses, we need to incorporate natural habitat to support our native bees *and* other beneficial insects.

Beneficial insects include pollinators and natural enemies of crop, garden, and/or forest pests. Pollinators include all animals (insects, birds, bats, small mammals, even humans!) that move pollen from a male part of a flower to a female part of a flower, allowing the plant to reproduce and create seed. (This in turn provides fruit, vegetables, and other items we eat from the plant!) Examples of native insect pollinators include bees, hoverflies, moths, wasps, flies, and butterflies. Examples of natural enemies include predators and parasitic insects such as lady beetles, lacewings, parasitoid wasps, ground beetles, fireflies, and soldier beetles.

Native beneficial insects are often overlooked and ignored. Think of your home garden. After all that work of planting and weeding, you expect your tomatoes, cucumbers, carrots, onions, strawberries, green beans, watermelon, apples, and peaches to grow. Yet, without pollinators, you would not have any of these crops! And without the natural enemies of pests like aphids, slugs, and caterpillars – you would likely not harvest as much!

The value of encouraging these beneficial insects on your farm can provide an alternative to insecticides, increase farm diversity, reduce costs, and support the natural ecosystem. The habitat can also support soil and water conservation, and in some cases, improve crop yields. (Think about cover crops - they are not just for soil, water, and nutrient benefits; they also benefit insects!)



*Bumblebee on Oxeye Sunflower plant*

### **HABITAT is the key ingredient**

Research demonstrates that if more than 20% of a farm is diverse habitat, pest control by beneficial insects is observed throughout the fields – perhaps keeping the pests below an economic threshold. You may be reducing the amount of crop acreage, but the cost of reduced insecticides or increased crop yields on the rest of the acreage (bigger and more fruit) could far outweigh the lost acreage. And you can utilize poor production areas like those odd areas you can never get into because it is too wet, poor soils, stony, etc.



*Soldier Beetle  
(a pest predator & pollinator)  
on Mountainmint plant*

Whether you are a home gardener, a cash crop farmer, or a grazer, you can easily incorporate habitat – in a ¼ lot or a 100 acre farm! You can start small and attract a diverse group of insects, or eventually incorporate specialized habitat to attract specific enemies of crop or garden pests.

### **Basic habitat needs include food sources, shelter for nesting and overwintering, and areas protected from pesticides.**

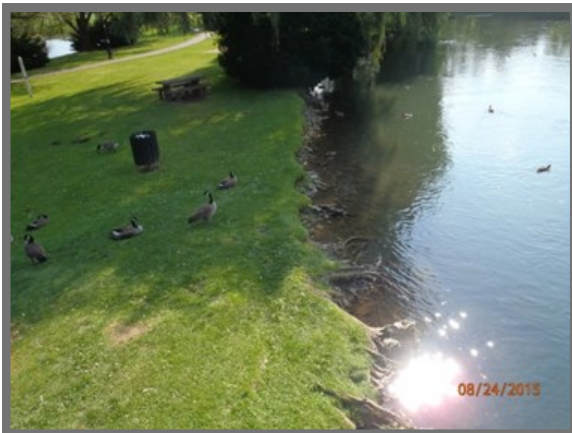
For more information, check out the Xerces Society website. (<https://xerces.org/>) The Xerces Society is a nonprofit organization that protects biological diversity through conservation of invertebrates and their habitat. They work with farmers and scientists across the country to protect habitat for beneficial insects that pollinate crops and prey upon crop pests. The website provides lists of suitable native plants for your soil type to allow you to start small or create a large pollinator habitat meadow!

## **Watershed News...**

July 2018 marked another accomplishment in the series of improvements completed at Talleyrand Park in Bellefonte. The Centre County Conservation District partnered with the U.S. Fish and Wildlife Service, the Talleyrand Park Committee of the Bellefonte Historical and Cultural Association, and Bellefonte Borough to install a 350-foot mud sill along a section of Spring Creek. This project improved a stretch of the stream by providing stability to the streambank, thereby decreasing erosion and minimizing the quantity of sediment entering Spring Creek. This structure is also designed to benefit aquatic life, by creating overhead cover for fish and slowing down near-bank velocities. It also reclaimed several feet of eroded streambank.

With the amount of rainfall the region received in July, this was no simple endeavor. However, mid-July provided some reprieve from precipitation and U.S. Fish and Wildlife worked diligently to complete the project. The structure was truly tested, as the final several days of the month brought an exorbitant amount of rain to the region. The most profound effects seemed to have occurred as the calendar flipped to August, with over four (4) inches of rain falling overnight on August 3, resulting in several of the region's streams topping over their banks, and many roads and low-lying areas inundated with water.

Rest assured, the mud sill withstood the extremely high flows and days later, appeared completely unaltered. The structure also functioned wonderfully, anchoring the streambank in place and greatly minimizing erosion. Short of minor re-seeding in areas behind the mud sill, the entire project remains without any need for repair or maintenance. Another successful stream improvement project completed and thoroughly tested. Many thanks to all the partners involved in this effort.



**Streambank suffering from erosion.**



**Late stage of improvement. Note, the amount of bank reclaimed.**



**August 3, 2018 flood. Note, the location of streambank.**



**Three days after flood. Bank completely intact.**



# Guidelines for Maintaining Streams in Your Community

DEP wants to help Pennsylvania communities complete all necessary stream work in a way that is environmentally-responsible, reduces the likelihood of future flooding problems, and complies with regulations. When in doubt, contact PA DEP for assistance before you start stream work projects.



## Green Light—Go!

Proceed—These actions do not require DEP notification, pre-approval, or additional permits:

- Removing woody debris and manmade debris materials from the stream, banks, and riparian areas by hand or using handheld equipment
- Removing above items using heavy equipment from the bank; equipment should not enter the stream or dig into the streambed
- Removing gravel and debris in and close to bridges and culverts (Note: review permit conditions first)
- Crossing a flooded stream for emergency access to your property, if conditions are safe

## Yellow Light—Slow Down!

Call DEP first—Notification, pre-approval, or emergency permits may be required:

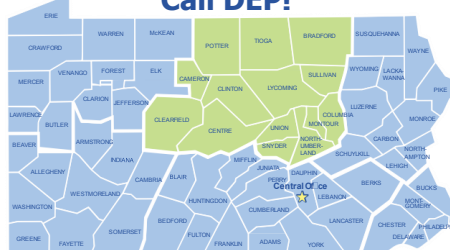
- Rebuilding roads and bridges across streams
- Streambank stabilization projects, including riprap
- Removing gravel bars from the stream channel using heavy equipment
- Repairing a bridge or culvert, or removing one in danger of failure

## Red Light—Stop!

These actions require permits from DEP, and possibly from the U.S. Army Corps of Engineers or other agencies:

- Redirecting the flow of a stream by reshaping gravel bars, or moving a stream bank
- Moving/relocating a stream
- Dredging or damming streams, or creating dikes
- Building a new bridge or culvert

## Remember: When in Doubt, Call DEP!



- North-central (Williamsport) Regional Office  
208 W. 3rd St., Suite 101  
Williamsport, PA 17701-6448  
Phone: (570) 327-3636



Visit the DEP website at <http://www.dep.pa.gov> for more information about relevant permits and programs.

## What is a regulated stream/floodway?

A regulated stream is any channel with defined bed and banks that can convey water. It can be natural or man made, perennial or intermittent.

Some municipalities have flood insurance studies and maps prepared by the Federal Emergency Management Agency (FEMA) which indicate the floodway boundary for some streams. In the absence of such a study, the floodway shall be considered to extend 50 feet landward from the top of each streambank. In Centre County, FEMA has delineated floodway areas along Spring Creek in Spring Township, Bellefonte Borough and Milesburg Borough; and also along Bald Eagle Creek in Boggs Township, Milesburg Borough, and some downstream municipalities. Most other areas and streams would use the "50 foot rule" mentioned above.

The following is a list of **GENERAL PERMITS** commonly used in **Centre County** and reviewed by our office:

- GP-1 Fish Enhancement Structures
- GP-2 Private Recreational Docks
- GP-3 Bank Rehabilitation and Protection
- GP-4 Intake and Outfall Structures
- GP-5 Utility Line Stream Crossings
- GP-6 Agricultural Crossings and Ramps
- GP-7 Minor Road Crossings
- GP-8 Temporary Road Crossings
- GP-9 Agricultural Activities

Visit the Centre County Conservation District website at:

<http://centrecountypa.gov>

- **Services**
- **Conservation District**
- **Stream Permits**

for more information about relevant permits & programs.

Conservation Conversation



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CALENDAR OF EVENTS

**September**  
12 Board Meeting  
**October**  
6-7 Dutch Fall Festival - Aaronsburg  
8 Columbus Day  
10 Board Meeting  
31 Halloween  
**November**  
7 Farm City Dinner  
14 Board Meeting  
12 Veteran's Day - Closed  
22-23 Thanksgiving—Closed  
**December**  
12 Board Meeting  
24-25 Christmas Holiday—Closed  
**January**  
Board Meeting—TBA  
**February**  
Board Meeting—TBA  
**March**  
Board Meeting—TBA

BOARD OF DIRECTORS

Dr. Robert Shannon, Chair  
Allen Ishler, Vice-Chair  
Steven G. Dershem, Commissioner

Tom Boldin

Lori Hartle

Matthew Ulmer

James Walizer

ASSOCIATE DIRECTORS

Al Stewart

Donn Fetterolf

Martin Melville

*If you wish to receive our newsletter electronically, please call our office or email:*

814-355-6817 Ext. 1454

[brmarks@centrecountypa.gov](mailto:brmarks@centrecountypa.gov)

CENTRE COUNTY

**RECYCLING HOTLINE** (814)238-6649

**DEP EMERGENCY HOTLINE** 1-800-541-2050

**COMMISSIONERS** (814)355-6700

**PLANNING OFFICE** (814)355-6791

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John Wataha, Agriculture Conservation/  
Nutrient Management Technician

Justin Kozak, Watershed Specialist/

Education Coordinator

Daina Beckstrand, CBP/NM Technician  
Jim Coslo Jr., Resource Conservation

Supervisor

Chris Myers, Resource Conservation

Coordinator I

Mike Philippe, Resource Conservation

Coordinator II

Barbara Ivicic, Department Clerk I

USDA-Natural Resource Conservation

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